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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/427,945	10/26/1999	KAZUO SAKAGAWA	FUSA-12.689A	3970

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EXAMINER

LUU, LE HIEN

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 03/06/2003

28

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/427,945

Applicant(s)

SAKAGAWA, KAZUO

Examiner

Le H Luu

Art Unit

2141

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6, 8, 11, 12, 14, 15, 40-55 and 58-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 8, 11-12, 14-15, 40-55, and 58-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

1. Claims 1-3, 6, 8, 11-12, 14-15, 40-55, and 58-70 are presented for examination.
2. Claim 40 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As to claim 40, "terminals which may accommodate" is indefinite. For purpose of examination, Examiner assume applicant meant "terminals which can accommodate".
3. A declaration that was mentioned in the remarks of preliminary amendment filed on 09/17/2001 has not been filed by applicant, and it will not be filed as stated by applicant in paper no. 26 filed on 01/10/2003.
4. The text of those sections of Title 35, U.S. Code § 103 (a) not included in this action can be found in a prior Office Action.
5. Claims 1, 8, 12, 40, 46, 49, and 58-70 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over "**Address Resolution Protocol**" by Finn in view of Mori patent no. **5,425,026**.
6. As to claim 40, Finn discloses the invention substantially as claimed, including a network system having a server, the method of registering in the server a corresponding

relationship between a first identifier and a second identifier for a communicating party, comprising the steps of:

receiving an interrogation request including a first value indicative of a request and a first identifier (LE\_APR\_REQUEST sent by LE client to LE server; page 2, SEC 6.0);

determining a corresponding second identifier is not registered in the server (a LAN destination has not been registered in LE server; page 4, SEC 6.2.4);

transferring the interrogating request to a plurality of terminals which accommodate the communicating party (LE server forwards LE\_ARP\_REQUEST; page 2, SEC 3.2.3; page 5, SEC 6.2.8);

receiving an answer including a second value indicative of an answer and a second identifier which corresponds to the communicating party identified by the first identifier, in response to the interrogation request (LE Client response to LE server LE\_ARP\_REQUEST with a LE\_ARP\_REPLY; page 2, SEC 3.2.3; page 2 SEC 6.0).

Finn teaches the server receives the answer in response to the interrogation. However, Finn does not explicitly teach registering the answer which includes a corresponding relationship between the first identifier and the second identifier.

Mori teaches registering in an address translation table of an address server a mapping of network address and port address (col. 7 line 47 - col. 8 line 28).

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of Finn and Mori to register the relationship between the first identifier and the second identifier which is included in the answer in a

address server because it would support address translation for users without generating undesired overhead traffic.

7. As to claim 46, Finn and Mori inherently teach the server periodically receives a terminal address interrogation request including a second identifier and a second value indicative of an answer from each terminal of the plurality of terminals, whereby the corresponding relationship between the first identifier of its own terminal and the second identifier is kept in an address table (Finn, pages 2 and 4, SEC. 6.0, 6.1.2, 6.1.12; Mori, col. 7 line 47 - col. 8 line 28).

8. As to claims 64-66, Finn teaches plurality of ATM terminals, first identifier is a protocol address, and second identifier is a terminal address (Finn, SEC 3.2.3 and SEC 6.0 on page 2).

9. Claims 2-3, 6, 11, 14-15, 41-45, 47-48, and 50-55 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over “**Address Resolution Protocol**” by Finn in view of Mori patent no. **5,425,026**, and further in view of **Burnett et al. (Burnett)** patent no. **5,633,869**.

10. As to claims 41-42, Finn and Mori teach the invention substantially as discussed above; however, they do not explicitly teach deleting an entry having a corresponding relationship between a first identifier and a second identifier, nor having the oldest

reference time. Burnett teaches entries in MAC-to-port table of an address translation table can be added, updated, deleted, and timeout (col. 15 line 65 - col. 16 line 60). Therefore, It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of Finn, Mori, and Burnett to delete or update the entries in the table when the entries is no longer needed because it would only keep the up-to-date entries in the table.

11. As to claims 43, Finn, Mori, and Burnett inherently teach the switch or exchange connects the server with a plurality of terminals by PVCs, and when the terminal address interrogation request in the form of a cell having a predetermined virtual channel identifier is entered from the server, the switch or exchange appends tag information indicating a terminal group to the cell, performs cell copying based on the tag information indicating the terminal group , and transfer the cell to terminals of the terminal group (Burnett, col. 9 line 1 - col. 10 line 68).

12. As to claim 44, Finn, Mori, and Burnett inherently teach a switch or exchange, and wherein the transferring step includes: a step in which the switch or exchange connects the server with the plurality of terminals by PVCs (permanent virtual channels) having identical values and divides the plurality of terminals into a plurality of groups, a step in which, when the terminal address interrogation request in the form of a cell and having the identical value for PVC is entered from the server. the switch or exchange performs cell copying, whereby the terminal address interrogation request cell is transferred in a first group, a step

in which the server performs monitoring to determine whether a prescribed terminal has answered with its own address within a set period of time; a step in which the server sends the terminal address interrogation request cell to terminals of the next group when no terminal answers with its own address with the set period of time, an a step in which the server transfers the terminal address interrogation request while successively changing the group until a prescribed terminal answers with its own address (Finn, pages 4-5, SEC. 6.1.8, 6.1.12, 6.2.6, 6.2.8 ; inherent features can be found in Burnett).

13. As to claim 45, Finn, Mori, and Burnett inherently teach the server receives the answer including a second identifier and the second value from the one of the plurality o terminals, the server registers the corresponding relationship between the first identifier and the second identifier in place of the address table designated by an index value which is calculated based on a value of the first identifier or the second identifier (Finn, page 2, SEC. 6.0, 6.1.4, 6.2.8; inherent features can be found in Burnett).

14. Claims 1-3, 6, 8, 11-12, 14-15, 47-55, 58-63, and 67-70 have similar limitations as claims 40-46 and 64-66; therefore, they are rejected under the same rationale.

15. In the remarks, applicant argued in substance that

(A) Prior art does not teach registering a corresponding relationship between the first identifier and the second identifier which is included in the answer wherein the answer is in response to the interrogation request message.

As to point (A), Finn teaches using LE\_ARP\_REPLY to response to an LE\_ARP\_REQUEST interrogation request sent by LE server or LE client to provide ATM address associated with a given MAC address (LE Client response to LE server LE\_ARP\_REQUEST with a LE\_ARP\_REPLY; page 2, SEC 3.2.3; page 2 SEC 6.0).

Finn teaches the server receives the answer in response to the interrogation. However, Finn does not explicitly teach registering the answer which includes a corresponding relationship between the first identifier and the second identifier.

Mori teaches registering in an address translation table of an address server a mapping of network address and port address (col. 7 line 47 - col. 8 line 28).

It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to combine the teachings of Finn and Mori to register the relationship between the first identifier and the second identifier which is included in the answer in a address server because it would support address translation for users without generating undesired overhead traffic.

16. Applicant's arguments filed on 01/10/2003 and 01/28/2003 have been fully considered but they are not deemed to be persuasive.

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).



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A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Le H. Luu, whose telephone number is (703) 305-9650. The examiner can normally be reached Monday through Friday from 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached at (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7240.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

Any response to this final action should be mailed to:

**Box AF**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

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(703) 746-7239, (for formal communications; please mark  
"EXPEDITED PROCEDURE").

Or:

(703) 746-7240 (for informal or draft communications, please label  
"PROPOSED" or "DRAFT").

Or:

(703) 746-7238 (for After Final communications).

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal  
Drive, Arlington. VA., Sixth Floor (Receptionist).



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LE HIEN LUU  
PRIMARY EXAMINER

March 04, 2003